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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,392	10/15/2003	Leo Chen	13989 B	2116

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EXAMINER

HINZE, LEO T

ART UNIT PAPER NUMBER

2854

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,392

Applicant(s)

CHEN, LEO

Examiner

Leo T. Hinze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 and 19-28 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5 and 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fang, US 6,536,941 (Fang) in view of Yamamoto et al., US 5,615,179 (Yamamoto).

a. Regarding claim 1:

Fang teaches a wristwatch capable of storing and transmitting data comprises:

a timing indicating component (40, Fig. 1);

a watch case (10, Fig. 1); and

a watch band (31, 32, Fig. 1) for fixing the wristwatch to people's wrist,

wherein, said wristwatch further comprises a circuit board assembly and a USB connector assembly (33, Fig. 1), said circuit board assembly is installed inside the watch case and comprises a circuit board, on which are installed a Flash Memory and a CPU (20, Fig. 2); said USB connector assembly comprises connection cable (21, Fig. 2) and a USB connector (33, Fig. 2), said connection cable consists of data leads and power leads, which are used to connect

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the circuit board with the USB connector, the USB connector is located outside the watch case; a housing means for housing and fixing the connection cable and the USB connector is provided on said watch band (34, Fig. 2). Fang is silent as to the specific details of the connector cable and the interface between the connector cable and the watch case and circuit board.

Fang does not teach wherein said connection cable extends out of the watch case from an opening hole at the seam between the watch case and the watch band, a water proof means is provided around the opening hole.

Yamamoto teaches an electronic apparatus (1, Fig. 17) with a fitting band (Fig. 1). The fitting band contains wires (30, Fig. 31) that extends out of the watch case from an opening hole (192, 193, Fig. 30) at the seam between the watch case and the watch band, a water proof means (82, Fig. 31) is provided around the opening hole.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Fang wherein said connection cable extends out of the watch case from an opening hole at the seam between the watch case and the watch band, a water proof means is provided around the opening hole, because a person having ordinary skill in the art would recognize that such a connection would provide a secure, waterproof connection between the connector and the memory in the watch, and a person having ordinary skill in the art would recognize that a waterproof watch would be advantageous for protecting the interior components of the watch from damage by moisture.

b. Regarding claim 2, the combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above. As properly combined in the rejection of claim 1,

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Yamamoto also teaches wherein said water proof means comprises a water proof gasket (82, Fig. 30), a sheeting (180, Fig. 31) and a step structure (o-ring groove for gasket 82, Fig. 31) of the watch case.

c. Regarding claim 3, the combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 2 above. As properly combined in the rejection of claim 2, Yamamoto also teaches wherein said step structure of the watch case consists of an inner step IA (o-ring groove for gasket 82, Fig. 31) and an outer step IB (step for mounting plate 180, Fig. 31); said water proof gasket is installed at the step IA, said sheeting is pressed to the step IB and is fused (87, 88, 181, 184, Figs. 30 and 31) with the watch case; the internal diameter of the water proof gasket is smaller than the external diameter of the connection cable after the water proof gasket is pressed and deformed by the sheeting ("deformation caused by pressure", col. 20, line 60 through col. 21, line 5).

d. Regarding claim 4:

The combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 2 above. Yamamoto also teaches a water proof gasket is in the shape of a circular ring (82, Fig. 31), and sheeting in the shape of a rectangle (180, Fig. 30).

The combination of Fang and Yamamoto does not teach sheeting in the shape of a circular ring.

It has been held that mere changes in shape are not sufficient to patentably distinguish an invention from the prior art. See MPEP § 2144.04 (IV).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to additionally modify Fang wherein the sheeting in the shape of a circular ring, because a person having ordinary skill in the art would recognize that a circular sheeting would require a circular mounting area, and a circular mounting area might be easier to manufacture than the square, stepped mounting area for item 180 shown in Fig. 30 of Yamamoto.

e. Regarding claim 5, the combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 2 above. As properly combined in the rejection of claim 2, Yamamoto also teaches wherein said connection cable passes through an opening hole of said watch case, said sheeting and said water proof gasket in turn, extends inside the wristwatch and is connected to the circuit board (Fig. 31).

f. Regarding claim 13, the combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above. Fang also teaches wherein said watch band is wrapped with a cover (34, Fig. 2) which has a cavity (342, Fig. 2) for receiving the USB connector.

g. Regarding claim 14, the combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 13 above. Fang also teaches wherein said cover is moveable on said watch band (band 32 runs through hole 341 in cover 34, Fig. 3).

h. Regarding claim 15, the combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above. As properly combined in the rejection of claim 1, Yamamoto also teaches wherein, an opening hole (192 193, Fig. 30), a groove (190a, Fig. 30)

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and a cover (180, Fig. 30) are connected in turn and extend outwards in the watch case; said groove is used for housing the USB connector.

3. Claims 10-12 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fang in view of Yamamoto as applied to claim 1 above, and further in view of Kondo, US 5,894,454 (Kondo).

a. Regarding claim 10:

The combination of Fang and Yamamoto teaches all that is claimed as discussed in the rejection of claim 1 above.

The combination of Fang and Yamamoto does not teach wherein said connector assembly further includes a water proof pushers, one end of said connection cable connects with said water proof pusher, the other end of it connects with the connector; said water proof pusher is installed in the opening hole of the watch case, and extends inside the watch case of the wristwatch, then further connect with the flash memory circuit board assembly.

Kondo teaches a portable apparatus wherein a connector assembly (33, Fig. 6) further includes a water proof pushers (44, Fig. 10), one end of said connection cable connects with said water proof pusher, the other end of it connects with the connector (30, Fig. 6); said water proof pusher is installed in the opening hole of the watch case (40, Fig. 11), and extends inside the watch case of the wristwatch, then further connect with the flash memory circuit board assembly.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to additionally modify Fang wherein said connector assembly further includes a water proof pushers, one end of said connection cable connects with said water proof

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pusher, the other end of it connects with the connector; said water proof pusher is installed in the opening hole of the watch case, and extends inside the watch case of the wristwatch, then further connect with the flash memory circuit board assembly, because a person having ordinary skill in the art would recognize that such a water proof pusher would provide a water proof connection, and would further allow the connector to be removed if desired by the user.

b. Regarding claim 11, the combination of Fang, Yamamoto and Kondo teaches all that is claimed as discussed in the rejection of claim 10 above. As properly combined in the rejection of claim 10, Kondo also teaches wherein said water proof pusher is equipped with a water proof gasket (48, Fig. 11), said water proof gasket fills the gap between the water proof pusher and the opening hole of said watch case (see Fig. 11).

c. Regarding claim 12, the combination of Fang, Yamamoto and Kondo teaches all that is claimed as discussed in the rejection of claim 10 above. As properly combined in the rejection of claim 10, Kondo also teaches wherein said connection cable is a four-core cable with four ends (44, Fig. 10), said water proof pusher has four ends, each end of the water proof pusher connects with the end of one core of the connection cable; and there are four opening holes in the watch case to house the water proof pusher.

d. Regarding claim 16, the combination of Fang, Yamamoto and Kondo teaches all that is claimed as discussed in the rejection of claim 10 above. As properly combined in the rejection of claim 10, Kondo also teaches wherein the connecting point of said circuit board assembly (70, Fig. 11) is a spring bar (47, Fig. 11), said water proof pusher also has a spring bar (45, Fig. 11), with which the water proof pusher connects with the circuit board assembly.

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e. Regarding claim 17, the combination of Fang, Yamamoto and Kondo teaches all that is claimed as discussed in the rejection of claim 10 above. As properly combined in the rejection of claim 10, Kondo also teaches wherein, the connecting point of said circuit board assembly (70, Fig. 11) is a conductive spring (47, Fig. 11) sheet, said water proof pusher connects with the circuit board assembly via said conductive spring sheet.

f. Regarding claim 18, the combination of Fang, Yamamoto and Kondo teaches all that is claimed as discussed in the rejection of claim 10 above. Fang also teaches said circuit board assembly (20, Fig. 2) further includes a time-control IC in addition to the flash memory and the CPU. Kondo also teaches wherein said wristwatch is a digital watch with a LCD (23, Fig. 10).

Response to Arguments

4. Applicant's arguments filed 02 May 2005 have been fully considered but they are not persuasive.

5. Applicant's arguments on p. 15 that Fang's invention is difficult to produce and that it is convenient to replace the USB connector of the present invention when repairing or maintaining as needed do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which applicant thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the applicant believes claims of the instant application are particularly distinguished over the prior art rejections as set forth above.

6. In response to applicant's argument on p. 15 that there is no teaching in the Fang, Yamamoto and Kondo reference taken alone or in combination which leads to the structure of

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the present invention, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the examiner has clearly set forth the reasons and motivation for combining the references as discussed above.

7. In response to applicant's argument on p. 17 that it is self-evident that applicant's invention is not rendered obvious by the prior cited art, whether considered alone or in combination, it is not self-evident to the examiner that the applicant's invention is not rendered obvious when considered as a whole, as shown by the rejection of the claims as discussed above.

8. In response to applicant's argument on p. 19 that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). The examiner has set forth the reasons for combining the references in the rejections of the claims as discussed above.

9. In response to applicant's argument on p. 19 that the prior art existed for many years and yet those skilled in the art never created wristwatch capable of storing and transmitting data

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comparable to applicant's is not prima facie evidence of non-obviousness. Such a lack of invention by persons skilled in the art could mean that nobody has yet attempted to solve the problem the applicant is attempting to solve, or simply that persons skilled in the art thought the invention of the instant application was too obvious to be granted patent rights.

Allowable Subject Matter

10. Claims 7-9 and 19-28 are allowed.
11. The examiner's statement of reasons for allowance can be found in the office action of 27 January 2005.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is (571) 272-2167. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leo T. Hinze
Patent Examiner
AU 2854
1 July 2005


REN YAN
PRIMARY EXAMINER